

have been observed in China, and go back to the middle of the second century before the Christian era, that for about 2000 years scarcely more than twenty or twenty-two of such phenomena can be adduced with certainty.

Before I proceed to general considerations, it seems not inappropriate to quote the narrative of an eye-witness, and, by dwelling on a particular instance, to depict the vividness of the impression produced by the sight of a new star. "On my return to the Danish islands from my travels in Germany," says Tycho Brahe, "I resided for some time with my uncle, Steno Bille (*ut aulicæ vitæ fastidium lenirem*), in the old and pleasantly situated monastery of Herritzwadt; and here I made it a practice not to leave my chemical laboratory until the evening. Raising my eyes, as usual, during one of my walks, to the well-known vault of heaven, I observed, with indescribable astonishment, near the zenith, in Cassiopeia, a radiant fixed star, of a magnitude never before seen. In my amazement, I doubted the evidence of my senses. However, to convince myself that it was no illusion, and to have the testimony of others, I summoned my assistants from the laboratory, and inquired of them, and of all the country people that passed by, if they also observed the star that had thus suddenly burst forth. I subsequently heard that, in Germany, wagoners and other common people first called the attention of astronomers to this great phenomenon in the heavens—a circumstance which, as in the case of non-predicted comets, furnished fresh occasion for the usual raillery at the expense of the learned.

"This new star," Tycho Brahe continues, "I found to be without a tail, not surrounded by any nebula, and perfectly like all other fixed stars, with the exception that it scintillated more strongly than stars of the first magnitude. Its brightness was greater than that of Sirius, α Lyræ, or Jupiter. For splendor, it was only comparable to Venus when nearest to the earth (that is, when only a quarter of her disk is illuminated). Those gifted with keen sight could, when the air was clear, discern the new star in the daytime, and even at noon. At night, when the sky was overcast, so that all other stars were hidden, it was often visible through the clouds, if they were not very dense (*nubes non admodum densas*). Its distances from the nearest stars of Cassiopeia, which, throughout the whole of the following year, I measured with great care, convinced me of its perfect immobility. Already, in December, 1572, its brilliancy began to